

Appl. No. : 10/081,028
Filed : February 21, 2002

REMARKS

In the Office Action mailed September 25, 2003 (Paper No. 7), the Examiner rejected Claims 14, 22, and 23 of the pending application under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In addition, the Examiner rejected Claims 1-34 of the pending application under 35 U.S.C. §103(a) as being unpatentable over Schweitzer et al. (US Patent No. 5,203,659) in view of Prentakis (US Patent No. 4,775,281) and Somekh et al. (US Patent No. 5,697,748) or some combination thereof. By this paper, the Applicant respectfully requests reconsideration of the above-identified application in the light of the amendments and remarks contained herein.

In the Office Action, the Examiner rejected Claims 14, 22, and 23 of the pending application under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. However, the Applicant has amended Claims 14 and 22 to distinctly claim the subject matter which the Applicant regards as the invention, wherein the “transport events” in claim 14 include the “first, second, third, and fourth transport events”, and the “chip-detaching system” in claim 22 has been changed to the “transport arrangement”. In addition, Claim 23 is dependent on amended Claim 22 and is currently in condition for allowance. Therefore, the Applicant respectfully requests reconsideration of Claims 14, 22, and 23 as amended with express allowance of the same.

In the Office Action, the Examiner rejected Claims 1, 6, 11, and 15 of the pending application under 35 U.S.C. §103(a) as being unpatentable over Schweitzer in view of Prentakis. However, the Applicant notes that Schweitzer fails to disclose first and second clamping devices that are disposed one above the other in a vertical arrangement on the holder and are further constructed so that each can individually release or grip a chip-carrier plate on one and the same angular position of the holder in a manner as disclosed by the Applicant in Claim 1. The advantage of the Applicant’s claimed invention is that, by arranging the clamping devices one above another in combination with making them capable of being separately controlled or actuated, the combined delivery and removal process is achieved in a more efficient manner. For example, the first clamping device can remove a first plate from the magazine for subsequent

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delivery to the processing station while the second clamping device removes a second plate from the processing station and deposits the second plate into the magazine.

After careful review, Schweitzer does not teach this. In fact, Schweitzer teaches (column 2, lines 45-49) and illustrates (Figure 4) first and second clamp means mounted in the same horizontal plane at 90° to each other on a rotatable head. Therefore, Schweitzer cannot not accomplish the same functional advantages of the Applicant's claimed invention. Unfortunately, Schweitzer cannot separately remove a plate from the magazine with a first clamping means and deposit another plate into the magazine with a second clamping means. The disadvantage to Schweitzer's invention is the additional production time needed to rotate the head for each removal and deposit iteration from the first and second clamping means.

As such, Schweitzer teaches away from the Applicant's claimed invention as defined in Claim 1 by using first and second clamp means mounted in the same horizontal plane at 90° to each other on a rotatable head. Thus, since Schweitzer expressly teaches away from the Applicant's claimed invention, there can be no suggestion to modify Schweitzer's device with the teachings of Prentakis or any of the other cited references to thereby produce the advantageous results of the Applicant's claimed invention. In fact, even though Prentakis teaches a vertical arrangement of first and second clamping means, they are rigidly attached and cannot separately transport plates in a manner as claimed by the Applicant in Claim 1.

In addition, Prentakis describes (column 2, lines 45-68) and illustrates (Figure 1) an overall arrangement of a magazine, processing station, and transport arrangement, wherein the magazine is arranged on a straight line with the holder of the transport arrangement and the processing station such that the magazine is arranged behind the processing station. As with Schweitzer, the device of Prentakis cannot separately remove a plate from the magazine with a first clamp while depositing another plate into the magazine with a second clamp. Furthermore, Prentakis fails to teach the use of clamps and chip-carrier plates for transport. Instead, Prentakis teaches (column 3, lines 1-13 and 41-43) the use of vacuum wands to grasp wafers for transport. Therefore, it would not have been obvious to combine the vertically disposed vacuum wands of Prentakis with the rotatable head of Schweitzer having horizontally disposed clamping means. After careful review, the teachings of Schweitzer in combination with the teachings of Prentakis would not function in the same manner as the Applicant's claimed invention of Claim 1.

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For these reasons disclosed herein, the Applicant submits that Claim 1 including Claims 6, 11, and 15 due to similar subject matter are patentable over the art of record and respectfully requests express allowance of the same. Also, the Applicant respectfully requests reconsideration of the remaining claims 2-5, 7-10, 12-14, and 16-34, which further define patentable subject matter and are allowable due to their dependencies on Claims 1, 6, 11, and 15, respectively.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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